

Abstract

In a telecommunications transmission system using a DTM system as a multicarrier system and having at least two VDSL systems, each including a pair of modems, the at least two VDSL systems belonging to a single binder group common to both VDSL systems, a method in the DMT system for keeping DMT frames aligned to the same frame timing includes estimating the time mis-alignment and power of cross-talk DMT signals added to a received DMT signal when the estimate is used by the modem to synchronize its own frame timing to a main cross-talkers frame timing, using auto-correlation on the received signal and a delayed copy of the received signal, and detecting correlation maxima that determine the frame boundaries of different DMT components of the received signal.